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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,385	09/25/2003	Thomas H. Quinn	14369.1USU1	2568
23552	7590	08/19/2004	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			SASTRI, SATYA B	
			ART UNIT	PAPER NUMBER
			1713	
DATE MAILED: 08/19/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/673,385	QUINN, THOMAS H.	
	Examiner	Art Unit	
	Satya B Sastri	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-103 is/are pending in the application.
- 4a) Of the above claim(s) 1-4 and 20-103 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-103 are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/25/03, 2/9/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to application filed on September 25, 2003.

Claims 1-103 are now pending in the application.

Election/Restrictions

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. *Claims 1-4*, drawn to hot melt adhesive composition, classified in class 524, subclass 570.
 - II. *Claims 5-19*, drawn to another hot melt adhesive composition, classified in class 524, subclass 579.
 - III. *Claims 20-32*, drawn to a disposable article, classified in class 428, subclass 355.
 - IV. *Claims 33-42*, drawn to a method of assembling an article, classified in class 156, subclass 320.
 - V. *Claims 43-61*, drawn to yet another hot melt adhesive, classified in class 524, subclass 560.
 - VI. *Claims 62-75*, drawn to a disposable article, classified in class 428, subclass 219.
 - VII. *Claims 76-87*, drawn to another method of assembling an article, classified in class 156, subclass 325.

Art Unit: 1713

VIII. ***Claims 88-103***, drawn to a different hot melt adhesive, classified in class 515, subclass various.

3. Invention I and VIII and unrelated to all other inventions. Inventions II and V, II and VI, II and VII, III and V, III and VI, III and VII, IV and V, IV and VI, IV and VII are also unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are unrelated because the various adhesives have different chemical constitution and therefore, have different properties, different methods of usage and different products derived therefrom.

4. Inventions II and III and V and VI are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful for bonding two film layers and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds

Art Unit: 1713

one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

5. Inventions III and IV and VI and VII Inventions are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by a materially different process, such as spraying a solution of a hot melt adhesive on the film and subjecting two films to the action of temperature and/or pressure.

6. Inventions II and IV and V and VII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case product is deemed to be useful for bonding two film layers.

7. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Art Unit: 1713

8. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

9. In the petition dated Sept. 25, 2003, a provisional election was made without traverse to prosecute the invention of II, *claims 5-19*. This was confirmed during a telephone conversation with Mr. Mark DiPietro on April 29, 2004. Affirmation of this election must be made by applicant in replying to this Office action. *Claims 1-4, 20-103* are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Specification

10. The disclosure is objected to because of the following informalities:

Claim 11 is objected to because of the confusing claim language. It is unclear what "the resin comprises about 20-40% of the adhesive" means. It is construed as the adhesive comprising about 20-40% of the resin.

Claim 12 is incomplete with term(s) missing after polymer in line 1. In this office action, the claim is interpreted as an adhesive comprising polymer: resin of at least 2:1.

Appropriate corrections are required.

Claim Rejections - 35 USC § 112

Art Unit: 1713

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. *Claims 5-19* are rejected under 35 U.S.C. 112, second paragraph, as being indefinite. The phrase **an effective amount** in *claim 5* is indefinite under the second paragraph of section 112, when the claim fails to state the function, which is to be achieved. In re Frederiksen, 213 F 2d 547, 102 USPQ 35 (CCPA 1954).

13. *Claim 10* is rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Dependent *claim 10* includes a tackifying resin with a softening point of less than 125°C. This contradicts the requirement of the parent claim, which includes a resin with softening point greater than 125°C.

14. *Claim 17* is rejected under 35 U.S.C. 112, second paragraph, as being indefinite. The meets and bounds of *claim 17* are unclear with the inclusion of the ranges of the individual components as well as the ratio of the components. For instance, when the lower limit of the polymer is 42%, the amount of resin has to be 41% or less to satisfy the ratio. However, this contradicts that the composition “consists essentially of the polymer and the resin” only.

Claim Rejections - 35 USC § 102 and 103

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. ***Claims 5, 10, 16 and 17*** are rejected under 35 U.S.C. 102(b) as anticipated by Dubois et al. (US 6,107,430).

Prior art to Dubois et al. is in regard to a hot-melt adhesive comprising **ethylene-C₂-C₂₀ α -olefin** and optionally a wax and a **tackifier** and has a viscosity less than 5000 at 150°C (abstract). The adhesive composition comprises from **20-65% by wt.** of the **interpolymer** based on ethylene and C₂-C₂₀ α -olefin monomers, from **10-60% by wt.** of at least one **tackifying resin** and 0-40% by weight of a wax (column 5, lines 1-10). Preferred interpolymers are those based on ethylene with propylene, 1-butene, 1-pentene, 1-hexene, 1-octene etc. Preferably, the 1-octene comonomer content is greater than 31% by weight if the interpolymer. The **melt index** of the polymer is preferably from **200 to 2000 g/10 min.** (column 12, lines 37-65). Additionally, the adhesive composition may

Art Unit: 1713

include a blend of interpolymers with varying melt indexes and melt viscosities (column 13, lines 11-25). The **tackifying resins** are hydrocarbon based aliphatic, cycloaliphatic and aromatic hydrocarbon and modified **hydrocarbons and hydrogenated versions** with **softening temperatures** ranging from **70 to 150°C**. The interpolymers may be additionally combined with rubbery **block copolymers** in amounts up to 20% by weight of the adhesive. Thus, **claims 5, 10, 16, 17** are anticipated by Dubois et al. MPEP 2131.02. If one of ordinary skill in the art is able to “at once envisage” the specific data point within the generic range, the point is anticipated. Ex parte A, 17 USPQ2d 1716 (Bd. Pat. App. & Inter. 1990).

18. **Claims 6-9, 12-15, 18 and 19** are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Dubois et al. (US 6,107,430).

The prior art to Dubois et al. is presented above in paragraph 17 and is incorporated herein by reference. The prior art teaches the broad range for the components as claimed in the instant invention without any specific teaching on the ratio of the polymer to the tackifier resin. If one of ordinary skill in the art is able to “at once envisage” the specific data point within the generic range, the point is anticipated. Ex parte A, 17 USPQ2d 1716 (Bd. Pat. App. & Inter. 1990). MPEP 2131.02. In the event that one of the ordinary skill in the art would not immediately envisage applicants’ instantly claimed ratio, then the ratio is rendered obvious from the disclosure found in the prior art. The prior art contains each of applicants’ instantly claimed ranges and clearly suggests to one of ordinary skill

Art Unit: 1713

in the art that they be used in combination as claimed. Such a suggestion renders obvious applicants' instantly claimed ratio, and as such, the claims are not patentable.

With regard to the softening point of the adhesive in *claims 6, 7, 18 and 19*, given that the various components in the prior art compositions fall within the claimed range of the instant invention, a reasonable basis exists to believe that prior art compositions would inherently have the claimed softening temperatures as in the instant claims. It has been held that where applicant claims a composition in terms of function, property or characteristic where said function is not explicitly shown by the reference and where the examiner has explained why the function, property or characteristic is considered inherent in the prior art, it is appropriate for the examiner to make a rejection under both the applicable section of 35 USC 102 and 35 USC 103 such that the burden is placed upon the applicant to provide clear evidence that the respective compositions do in fact differ. *In re Best*, 195 USPQ 430, 433 (CCPA 1977); *In re Fitzgerald et al.*, 205 USPQ 594, 596 (CCPA 1980).

Allowable Subject Matter

19. ***Claim 11*** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and overcoming the rejection based on 35 U.S.C. 112, second paragraph.

The following is a statement of reasons for the indication of allowable subject matter: The instant claim includes a specific copolymer comprising 8-14% by wt. of α -

Art Unit: 1713

olefin in contrast to the prior art interpolymers in which the 1-octene comonomer content is greater than 31% by weight, based on the total weight of the interpolymers.

Conclusion

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satya Sastri at (571) 212 1112.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached at (571) 212 1114.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Satya Sastri

SATYA SASTRI

August 13, 2004

TATYANA ZALUKAEVA
PRIMARY EXAMINER

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